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April 12, 2004

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Joint Petition for Expedited Rulemaking Concerning the
Communications Assistance for Law Enforcement Act
Rulemaking 10865

Dear Ms. Salas:

Please find attached the Comments of Verizon on Law Enforcement's Joint Petition for Expedited Rulemaking Concerning the Communications Assistance for Law Enforcement Act.

Should there be any questions, please contact me at 202.663.6083.

Respectfully submitted,



Samir Jain

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

Joint Petition for Expedited Rulemaking
Concerning the Communications Assistance for
Law Enforcement Act

DA No. 04-700

RM 10865

**COMMENTS OF VERIZON ON LAW ENFORCEMENT'S JOINT PETITION FOR
EXPEDITED RULEMAKING CONCERNING THE COMMUNICATIONS
ASSISTANCE FOR LAW ENFORCEMENT ACT**

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Verizon^{1/} recognizes the importance of carriers' obligations to comply with the Communications Assistance for Law Enforcement Act ("CALEA") and is committed to meeting those obligations. Verizon has a long history of working with law enforcement on CALEA issues and is committed to complying expeditiously with the capability requirements of section 103 of CALEA. Indeed, Verizon has been an industry leader in terms of facilitating and implementing CALEA solutions for circuit-switched services including, for example, helping to facilitate the FBI's buy-outs of CALEA capabilities from Lucent and AGCS. And Verizon has met its compliance obligations for circuit-switched services in accordance with the flexible deployment plan it worked out with the FBI and filed with the Commission.

Notwithstanding the continuing uncertainty concerning the precise content or scope of CALEA's requirements as applied to packet-based services, Verizon also has continued to press ahead in working with other industry members to develop industry standards and with its vendors to develop CALEA solutions for these services. For example, Verizon's RFP for the

^{1/} This petition is filed on behalf of the entities affiliated with the Verizon companies listed in Attachment A.

softswitches that will be used to provide the network-based voice over IP services that it plans to roll out later this year included a requirement that the equipment comply with CALEA.

Verizon's deal with Nortel to provide softswitches for this service includes the provision of CALEA capabilities, and Verizon is continuing to work with Nortel to fully develop and test the CALEA capabilities for the network-based voice over IP services it plans to offer using these softswitches. As to other packet-mode services, Verizon also has worked with standards organizations and its vendors to determine how to meet CALEA requirements and continues to work actively on the development of applicable standards and CALEA solutions.

In this proceeding, the Department of Justice, the FBI, and the DEA (collectively, the "Petitioners") raise several significant issues concerning the applicability of CALEA to broadband services.^{2/} In particular, the Petitioners argue that the Commission should issue a ruling declaring that, regardless of whether they are classified under Title I or Title II of the Communications Act for regulatory purposes, voice over IP and broadband access services fall within the scope of CALEA. Verizon agrees that such a finding is consistent with the CALEA definition of "telecommunications carrier," which, as the Petitioners note, is different from and broader than the Communications Act definition of that term. Moreover, construing CALEA to apply to all providers of voice over IP and broadband access services will prevent individuals from attempting to evade law enforcement simply by using those services that do not have to be CALEA-compliant.

First, with respect to voice over IP, Verizon agrees with the Petitioners that these services fall within the scope of CALEA and that it is critical for the Commission to make clear that this

^{2/} See United States Dep't of Justice, Federal Bureau of Investigation and Drug Enforcement Administration, Joint Petition for Expedited Rulemaking, filed March 10, 2004 ("Petition").

is true for *all* providers of these services, including voice over IP application providers. For example, if a carrier is simply providing the underlying transport service (*e.g.*, DSL) and an application provider is providing the voice over IP, that application provider should have the CALEA obligation to provide law enforcement with information about the calls using its service, including the call-identifying information. Indeed, in such a case, although the transport provider could provide law enforcement with the target's entire broadband packet stream, it would not reasonably be able to interpret the information at the higher levels of the Internet protocol stack and provide law enforcement with, for example, call-identifying information at the application layer. Thus, CALEA's obligations should apply to the provider that controls the service, functionality, facility, or equipment necessary to meet law enforcement's needs and should correspond to the particular role that the provider is playing.

Second, as to broadband access services generally, Verizon likewise agrees with the Petitioners that the regulatory classification of broadband transmission or switching services under Title I of the Act would not affect the CALEA obligations that would apply if those services were classified under Title II. It also is critical for the Commission to make clear that CALEA applies equally regardless of the identity of the provider, and, in particular, that the obligations apply fully to broadband access services provided by cable companies and other competing providers. That result is both consistent with the relevant definitions under CALEA and necessary to ensure that individuals cannot escape surveillance simply based on the broadband access service they choose. Though not specifically discussed in the petition, the Commission also needs to define precisely terms such as "call-identifying information" in the context of broadband access services so that all providers and the manufacturers that supply them know the scope of their obligations. The meaning of this term has been the subject of

considerable controversy in connection with circuit-switched services and is even more unclear as to packet-mode communications. Accordingly, providing guidance on the precise scope of CALEA's requirements in the context of packet-switched broadband services will facilitate development of capabilities to meet those requirements and thereby help promote deployment of such capabilities as quickly as it is reasonably achievable.

While Verizon therefore agrees with the basic thrust of the petition, as discussed below, it has some concerns with some of the specific proposals Petitioners make in connection with particular procedural issues, deadlines for compliance, and cost recovery. The Commission should carefully explore these proposals in its rulemaking proceeding to ensure that its decisions on these issues are consistent with the statute, while at the same time meeting critical law enforcement needs.

I. SERVICES TO WHICH CALEA IS APPLICABLE

The basic thrust of Petitioners' argument is that the Commission should make clear that CALEA applies to all providers of voice over IP services and "broadband access" services, and that it applies regardless of whether these services are classified under Title I or Title II of the Communications Act for regulatory purposes. As we discuss immediately below, Verizon generally agrees with these proposals.

First, Verizon agrees that all providers of voice over IP services should be subject to CALEA. (Petition at 15-16.) As the Petitioners explain, this result is consistent with the statute because CALEA's definitional provisions are different from and broader than those of the Communications Act. While CALEA by its terms apply to any "telecommunications carrier," CALEA also contains its own unique definition of that term. Specifically, under the first of CALEA's definitional provisions, an entity qualifies as a telecommunications carrier if it is "engaged in the transmission or switching" of electronic communication as a "common carrier."

47 U.S.C. § 1001(8)(A). In addition, under the separate second prong of CALEA's definition, an entity also qualifies as a telecommunications carrier if it is "engaged in providing wire or electronic communication switching or transmission *service*" that is a "replacement for a substantial portion of the local telephone exchange *service*" and it is in the public interest. 47 U.S.C. § 1001(8)(B) (emphasis added).^{3/} Significantly, under this latter provision, an entity need not actually perform the transmission or switching itself, but instead merely needs to be engaged in *providing* an electronic communication *service* that involves switching or transmission, regardless of whether it or some other entity performs the actual transmission or switching. And since all voice over IP providers offer a form of electronic communication service that necessarily involves switching or transmission in order to function, and that is a replacement for voice services that have long been part of local telephone exchange services, these services readily fall within the scope of CALEA's second definitional provisions regardless of whether they are classified as common carrier services for regulatory purposes under the Communications Act.^{4/}

^{3/} Of course, the requirement that a service be a "replacement for a substantial portion of the local exchange telephone *service*" cannot reasonably be construed to impose some form of market share or geographical reach standard. Rather, it can only be reasonably understood in functional terms. For example, the ability to make and receive voice telephone calls obviously is a key function of local telephone exchange service, and a competing service that offered these same functions therefore would satisfy this aspect of the definition.

^{4/} Numerous services that already are offered today or are now being rolled out clearly qualify as voice over IP services for these purposes. By way of example, such services are now being provided by entities ranging from cable companies such as Cablevision and Time Warner, to long distance carriers such as AT&T, to stand alone voice over IP providers such as Vonage and many others. There also are other emerging services that may or may not qualify as voice over IP services for these purposes, such as voice applications embedded in e-mails or other such services. The Commission may need to develop a full record in the rulemaking so that it can determine which of these other types of services are voice over IP services to which CALEA applies. This is consistent with the Commission's recognition that "voice over IP" is not a well-defined term, and its request for comment concerning how that term should be defined. Notice

Indeed, Verizon has worked actively with its vendors to provide CALEA capabilities in connection with its own network-based voice over IP service that it plans to roll out later this year. To that end, Verizon's RFP for the softswitches that will be used to provide these services included a requirement that the equipment comply with CALEA requirements even though the industry standard had not yet been completed at that time. Verizon's deal with Nortel to provide softswitches for this service includes the provision of CALEA capabilities, and, now that an industry standard has been developed, Verizon is continuing to work with Nortel to fully develop and test the CALEA capabilities for the network-based voice over IP services it plans to offer using these softswitches.

The Commission should make clear that CALEA obligations apply to all voice over IP service providers, and not just to the underlying transport provider whose network is used to carry voice over IP traffic. For example, where Verizon provides only the underlying transport service, such as DSL, and a non-affiliated provider provides voice over IP service, Verizon would be switching and forwarding data based on information at layers one (physical), two (data-link), or three (network) of the protocol stack.^{5/} As a result, although Verizon could provide law enforcement with the customer's entire packet stream, Verizon's routers and switches would not normally process or be able to interpret higher layers, including layer 7, the application layer. In such cases, Verizon often is unaware of what type of communication and information (e.g., voice,

of Proposed Rulemaking, *IP-Enabled Services*, WC Docket No. 04-36, FCC 04-28 ¶¶ 36-37 (rel. Mar. 10, 2004) ("*VoIP NPRM*").

^{5/} Networks are often organized into protocol layers to reduce design complexity. Each protocol layer has a particular function(s) needed to transmit data. Network equipment typically operates at a subset of layers, whereas end-systems or hosts process all seven layers. A standard model called the ISO (International Standards Organization) OSI (Open Systems Interconnection) Reference Model consists of seven layers, which are as follows (starting from layer 1): physical, data link, network, transport, session, presentation, and application.

data, content, signaling) is being transmitted. In the case of the DSL customer, for example, Verizon in many cases would not know whether the customer was using its third-party voice over IP application, sending an e-mail, surfing the Internet, or engaging in some other activity. In such cases, it is not clear how or if Verizon could filter the packet stream to isolate the information relating to a voice over IP communication. Rather, the CALEA obligation should fall to the voice over IP application provider, which can isolate and interpret the relevant information.

Second, Verizon also agrees with the Petitioners that the regulatory classification of packet-switched “broadband access” services under Title I does not affect the CALEA obligations that would apply if these services were classified as Title II. On the contrary, as explained above, the definition of a “telecommunications carrier” subject to CALEA requirements is different from and broader than the definition of that term under the Communications Act. Accordingly, the applicability of CALEA does not turn on whether the service provider is classified as a common carrier subject to Title II for purposes of the Communications Act, and any obligations under CALEA should apply equally to all providers of such services. Thus, a broadband access service falls within the reach of CALEA if it involves a transmission or switching service and is a replacement for a function previously provided by the local telephone exchange service; for example, packet-switched broadband access services inherently involve transmission or switching services and many consumers now use broadband access services in place of a dial-up modem Internet connection. *See* 47 U.S.C. § 1001(8)(B)(ii).

It is critical, however, that the Commission make clear that any obligations imposed by CALEA apply equally to *all* competing providers of broadband access services, regardless of their regulatory classification. In particular, given the Commission’s prior determination that

DSL falls within the scope of CALEA,^{6/} cable modem service should also be subject to CALEA. If such services did not have to be CALEA-compliant and as a result traffic on such services could not be intercepted, that would encourage those seeking to evade law enforcement to use those services. Moreover, finding that these services are subject to CALEA is in the public interest because imposing CALEA requirements on one set of providers but not others would cause competitive distortions in the marketplace.

Furthermore, as with voice over IP, the underlying network provider will not always be in a position to provide law enforcement with all the information it needs, and thus the CALEA obligation must apply to all entities that play a role in providing the broadband access service. For example, Verizon does not have the ability to interpret information above layer 2 where it provides wholesale broadband access service; in such situations, law enforcement would have to determine who the wholesale customer is, and go to that customer to interpret information above layer 2. This division of responsibility is consistent with the obligations CALEA imposes with regard to digital technology more generally; as Congress explained, carriers are required to provide data carried in a digital form to law enforcement in that form, while it is law enforcement's responsibility to determine if that communication is "voice, fax, or data and [to] translat[e] it into usable form." House Report at 3402.

Third, although the inherent uncertainty concerning how "future services" will be provided makes problematic any definitive rule about the applicability of CALEA to such services, Verizon agrees that in many instances, future services that compete with existing local exchange services will fall within CALEA. Future services may use new technologies and be configured or provided in ways not currently foreseen. Thus, it is not possible to decide on an *ex*

^{6/} Second Report and Order, *Communications Assistance for Law Enforcement Act*, 15 FCC Rcd 7105, 7120 ¶ 27 (1999).

ante basis which particular future services will and will not fall within CALEA. However, as discussed above, the statute itself provides the standard to apply as such future services are developed: under CALEA, a service that involves “transmission or switching” and that is a replacement for a “substantial portion” of local exchange service is covered whenever the Commission determines that such coverage is in the public interest.

The Petitioners suggest that the Commission adopt a “presumption” that any service that “directly competes” against a service already deemed to be covered by CALEA is also subject to CALEA. Presumably, Petitioners intend this as shorthand for the statute’s definitional standard, which extends to any service that is a replacement for a substantial portion of the local telephone exchange services that historically have been subject to CALEA.^{7/} With this understanding, Verizon generally agrees that in many instances such services would fall within CALEA because a competing service presumably would meet the statutory substantial replacement standard in many cases. Indeed, it is for this reason that, as discussed above, voice over IP and broadband access services fall within CALEA. Thus, to the extent that the Petitioners’ proposal is a shorthand for the statutory test, then the result it seeks is unobjectionable. An absolute categorical rule to that effect is unnecessary, however, and should not be adopted. Such a standard could stifle innovation in services and may create problems given the uncertainty about how technologies will evolve and how future services may be provided.^{8/}

^{7/} Of course, if the proposal were intended to extend CALEA’s requirements beyond those circumstances where the statutory standards are satisfied, it could not be adopted because it would be inconsistent with the statute’s terms. Accordingly, we assume for present purposes that this is not what was intended.

^{8/} For similar reasons, the Petitioners’ proposed presumption that a service currently provided using any packet-mode technology and covered by CALEA that subsequently is provided using a different technology will be covered by CALEA is also inappropriate. The determination of whether a service falls within CALEA depends on whether it meets the

The Petitioners also propose that the Commission adopt a rule under which future services generally would have to be compliant at the time they are rolled out. (Petition at 53-55.) Presumably, the Petitioners mean here that *if* the service falls within the scope of CALEA and the statutory standards are met at the time of roll out because compliance is “reasonably achievable” then the service must be compliant when rolled out. If so, that is consistent with the requirements of the statute itself and a further rule to that effect should not be necessary.^{9/}

II. ISSUES REQUIRING RESOLUTION AFTER DEVELOPMENT OF A RECORD IN THE RULEMAKING PROCEEDING

In addition to the questions addressed above with respect to the scope of CALEA generally, the details of the procedural and scheduling proposals contained in the petition implicate a number of questions, or raise concerns, that are best resolved in the context of the Commission’s forthcoming rulemaking proceeding.

statutory definitions, which in at least some cases will depend precisely on the technologies involved and how the service is configured.

^{9/} Of course, if the proposal were intended to go beyond that and categorically require any new service to be CALEA-compliant absent FCC permission regardless of whether compliance is “reasonably achievable,” such a requirement would be inconsistent with the statute and could not be adopted. Indeed, Congress expressly rejected a prior version of CALEA that would have forbidden non-compliant services from being deployed: the statute as passed “is the exact opposite of the original versions of the legislation, which would have barred introduction of services or features that could not be tapped.” House Report at 3499. In addition, such a proposal would be contrary to the statutory purpose of encouraging innovation. The statute provides that CALEA should be implemented in a way that “serve[s] the policy of the United States to encourage the provision of new technologies and services,” 47 U.S.C. § 1006(b)(4), and the legislative history repeatedly stressed that CALEA was intended to preserve law enforcement’s intercept capabilities “without impeding the introduction of new technologies, features, and services.” House Report at 3489; *see also id.* at 3493, 3494. However, a rule forcing carriers to seek permission prior to deploying new services that were not CALEA-compliant and waiting for the FCC to act on such a request would impede the introduction of new services.

A. Call-Identifying Information

One issue the Commission should address in its rulemaking, even though it is not expressly raised in the petition, is the meaning of the term “call-identifying information” in the context of broadband access services. Such guidance would facilitate the development of industry standards and the development and deployment of CALEA capabilities as soon as reasonably achievable.

CALEA defines “call-identifying information” as “dialing or signaling information that identifies the origin, direction, destination, or termination of each communication generated or received by a subscriber by means of any equipment, facility, or service of a telecommunications carrier.” 47 U.S.C. § 1001(2). Though the Commission has concluded that this term encompasses not only telephone numbers, but also a range of signaling and other information in the context of circuit-switched communications, this guidance is of little relevance to broadband access services. Thus, while the Commission’s definitions “distinguish between origin, destination, direction, and termination and the information that identifies them; permit multiple origins, destinations, directions, and terminations in a call; and provide for determinations inside a network switch or at another point within a network,”^{10/} those concepts relate primarily to issues of call waiting, recall, and redirected calls, and thus are largely limited to the circuit-switched network. Much of what constitutes “call-identifying information” in the circuit-switched environment simply has no analog in packet networks, particularly with respect to data services.

Carriers need further guidance on what this term means with respect to packet services in order to ensure that the standards that are developed and the equipment that is deployed are

^{10/} Order on Remand, *Communications Assistance for Law Enforcement Act*, 17 FCC Rcd 6896, 6911 ¶ 47 (2002) (“*Order on Remand*”).

capable of providing the requisite information. “Routing information,” such as source and destination IP address on a packet, is the only information that is comparable to the information the Commission has determined to be “call-identifying information” in the context of the circuit-switched network. What constitutes routing information in packet networks depends on the protocol layer at which the network element or system functions. Each element or system uses information in the header of the protocol data unit to determine how to switch, forward, route, or process the packet. For this reason, “call-identifying information” should be defined, in the context of packet networks, in terms of the protocol level at which the equipment operates. Thus, for example, “call-identifying information” in an analog network may be analogous to the IP address at layer 3 and to a Media Access Control (MAC) address at layer 2 of the protocol stack. The Commission should clarify that the obligation of broadband service providers to provide access to “call-identifying information” requires such carriers to provide access to routing information *only*.

Furthermore, carriers should be required to provide only the routing information that they process and interpret in connection with the service they are providing. Indeed, the statute itself provides that a carrier is required to provide only call-identifying information that is “reasonably available” to the carrier. 47 U.S.C. § 1002(a)(2). Thus, for example, where an ISP service is provided to an end user by a wholesale ISP customer, that wholesale provider will provide the IP address (*i.e.*, control Layer 3), not the provider that sells the underlying transport to the customer that purchases the wholesale service. Thus, while the underlying transport provider may be able to provide law enforcement with certain routing information such as the MAC address, the wholesale customer should have the obligation to strip out the IP address information and provide it to law enforcement.

B. Defining Respective Obligations of Service Providers for Broadband Access Services

Although, as discussed above, the Commission should find that CALEA applies to broadband access service generally, it should further explore the respective obligations of various service providers in a packet-switched context in order properly to take into account the unique nature of these services. Specifically, CALEA imposes obligations on individual service providers only with respect to information to which a carrier has reasonable access and the ability to interpret in the context of the service being provided, and that necessarily depends on the particular service, the applications involved, the facilities used, and the network architecture. *See* House Judiciary Comm., Communications Assistance for Law Enforcement Act of 1994, H.R. Rep. 103-827(I) at 3502 (1994) *reprinted in* 1994 U.S.C.C.A.N. 3489 (“House Report”) (“The question of which communications are in a carrier’s control will depend on the design of the service or feature at issue, which this legislation does not purport to dictate.”).

In the traditional circuit-switched network, law enforcement most often can obtain all the information it needs from the central office switch from which the target is served. Packet services, by contrast, are complex and decentralized, such that a single provider often will not be able to interpret all the data or “translate” the packets to a useable form for law enforcement. For example, if one entity is providing the transport service and the second is providing an application, the first will have limited ability to interpret or translate data relating to the application, while the second often will not have access to all the target’s communications. Thus, law enforcement may have to go to both entities to obtain the information it needs (or alternatively, if it had the appropriate legal authorization, it could obtain the entire packet stream from the transport provider and then decipher the packets that it needs to see). *See* House Report at 3502 (CALEA was “not intended to guarantee ‘one-stop shopping’ for law enforcement.”).

Consider, for example, the “last mile” broadband access provider. In most situations, that provider will have access to the target’s full broadband access packet stream and so should be required under CALEA to be able to provide that packet stream to law enforcement in response to a full content order. Thus, a cable modem service that allows the target of a wiretap order to obtain broadband access from home has an obligation under CALEA to be capable of providing the target’s full stream of packet data to law enforcement. As discussed above with respect to voice over IP and broadband access services, however, the last mile access provider should *not* have the CALEA obligation to provide information at layers of the Internet protocol stack that it does not process or interpret when it provides the transmission and switching functions. Thus, for example, where Verizon provides retail broadband access service (and not the application), it often will not process or interpret information above layer 3 of the protocol stack for applications that it does not provide, and thus will lack the ability to assist law enforcement in translating data to a usable form. Nor will Verizon necessarily be aware what carrier *does* provide applications or services that use these layers. Thus, law enforcement may have to determine who the appropriate entity is, and go to that provider for information on the higher layers.

C. Proposed Benchmarks and Timeline for Packet-Switched Services

Verizon has worked and will continue to work with law enforcement and do what is necessary to meet its obligations under CALEA as expeditiously as possible. For example, Verizon worked closely with law enforcement in the development of the FBI’s flexible deployment program and helped facilitate the FBI’s buy-outs of CALEA capabilities from Lucent and AGCS. Verizon also has brought its circuit switched facilities into compliance with CALEA in accordance with the terms of the flexible deployment plan it negotiated with the FBI and filed with the Commission. At this time, all 290 of Verizon’s circuit switches that were deployed after January 1, 1995 are compliant with CALEA’s capability requirements.

Moreover, Verizon has worked with law enforcement in prioritizing introduction of CALEA capable software releases on its pre-1995 circuit switches.^{11/} As a result of these efforts, all of Verizon's DMS 100 circuit switches and all but one of the 5ESS priority sites have the requisite CALEA capabilities.

Verizon also has continued to work with law enforcement, the industry, and its equipment vendors to determine how to meet CALEA's requirements for packet-mode services and to develop CALEA solutions for such services. As explained above, Verizon has moved aggressively to provide CALEA capabilities on the network-based voice over IP services that it plans to roll out later this year, and did so even in advance of the promulgation of final industry standards. Verizon was actively involved with a standards committee accredited by the American National Standards Institute (ANSI) that was working on a detailed standard (known as T1.678) for CALEA-compliance for voice over packet technologies in wireline communications networks. Even before that standard was finalized, Verizon's RFP for the softswitches it will use to provide its network-based voice over IP services specifically required that any proposal include a statement of compliance with "[s]tandards . . . under development that address the softswitch environment." The ANSI-accredited committee recently finalized and approved the T1.678 standard, work for which the FBI's CALEA Implementation Unit noted that it was "pleased with the spirit of cooperation demonstrated by the industry that has resulted in significant progress" to meet law enforcement's needs.^{12/} Verizon is working with its vendor to fully develop the details

^{11/} Under the terms of CALEA, a carrier generally must provide capability requirements on switches installed or deployed before January 1, 1995 only to the extent the Attorney General agrees to reimburse the direct costs of doing so. 47 U.S.C. §§ 1008(a), (d).

^{12/} Proposed Scope for Version 2 of T1.678, *Lawfully Authorized Electronic Surveillance (LAES) for Voice over Packet Technologies in Wireline Telecommunications Networks*, Electronic Surveillance Technology Section Federal Bureau of Investigation (T1S1 LAES Ad Hoc Group January 19-23, 2004).

of a solution consistent with that standard, after which they will engage in a cycle of testing, any further development, implementation, and deployment. Although these remaining steps mean there remains some uncertainty, Verizon anticipates that its network-based voice over IP service will provide CALEA capabilities and is working to finalize the details as expeditiously as possible.

With respect to other packet-switched or broadband access services, the development of software and equipment with “CALEA solutions” is still at an earlier stage than for voice over IP service.^{13/} Verizon continues to work with law enforcement, standards organizations, and the industry in determining how to comply with CALEA for these services and defining some of the relevant standards. However, there remains significant uncertainty concerning complex issues such as the scope of CALEA’s capability requirements with respect to broadband access services; what the requirements mean when applied to such services (*e.g.*, what is the packet-mode analogy to conference-call information provided for circuit switched communications); and the form in which carriers must deliver intercepted information to law enforcement.

^{13/} Law enforcement recently provided a submission to the T1S1 committee concerning the development of a standard for surveillance of “Public IP Network Access Service in Wireline Networks” (“PIPNAS”). Verizon does not necessarily agree with law enforcement that the specific capabilities and other technical requirements law enforcement has listed in that document should all be required or are reasonably achievable. But the Commission need not address or endorse law enforcement’s PIPNAS proposal in this proceeding and can instead wait to address any remaining issues if law enforcement or another party files a deficiency petition pursuant to 47 U.S.C. § 1006(b). As law enforcement seems to recognize, particular technical issues of how various carriers must comply with CALEA obligations are beyond the scope of this petition, and should be addressed in the industry standards-setting process. *See* Frequently Misunderstood Questions on Joint Petition for Expedited Rulemaking, (<http://www.askcalea.net/jper.html>) (“[T]he petition contends that CALEA should apply to certain broadband services but does not address the issue of what technical capabilities those broadband providers should deliver to Law Enforcement. CALEA already permits those service providers to fashion their own technical standards as they see fit. If Law Enforcement considers an industry technical standard deficient, it can seek to change the standard only by filing a special ‘deficiency’ petition before the Commission.”).

As a result, as Verizon recently explained in some detail in its request for an extension of the deadline for packet-switched services, compliance with CALEA's requirements for these services is not yet reasonably achievable. In its rulemaking proceeding, the Commission should develop a record to consider more fully what is required to bring broadband access services generally into compliance with CALEA consistent with the statutory framework and in a way that will allow industry the opportunity to develop industry-wide CALEA-compliant broadband access solutions. Of course, during this time, carriers would remain subject to their obligations under Title III and other similar statutes to assist law enforcement with individual surveillance requests, including for packet-based services, as they already do today.

While Verizon is committed to developing and deploying CALEA solutions as soon as possible, the Petitioners' proposed schedule of benchmarks raises significant concerns. *First*, the Petitioners propose that all carriers file within thirty days of a Commission Public Notice a status report on their CALEA compliance with respect to each of their packet-mode services. But, in many cases, no industry standards yet exist and there remains continuing uncertainty about issues such as what "call-identifying information" means with respect to each packet service. In these circumstances, when it is not yet clear in a number of respects what precisely CALEA requires in a packet-switched environment, carriers cannot assess whether they are in compliance.

Second, law enforcement proposes that carriers identify the standards they will use for CALEA compliance for each service within six months of the Public Notice. But some broadband access services are not standardized. And the FBI itself stated in January of this year that just the development of the industry standard for "Public IP Network Access Service in

Wireline Networks” (“PIPNAS”) would take *eighteen* months.^{14/} A carrier clearly cannot choose or identify a standard that it will employ for a service when no standard exists for that service.^{15/} Although industry has made progress in defining some of the relevant standards for broadband access services, there remains much work to be done. The TIA standard-setting body recently approved J-STD-025-B,^{16/} a standard that elaborated on the technical requirements for complying with CALEA for packet communications. But this standard includes only high-level requirements common across all such packet services, and does not offer technical detail for all relevant services.^{17/} As noted above, there remain significant uncertainties and complications with respect to the development of standards for these services.^{18/}

^{14/} Standards Contribution, Lawfully Authorized Electronic Surveillance for Public IP Network Access Service in Wireline Networks, Electronic Surveillance Technology Section Federal Bureau of Investigation (T1S1 LAES Ad Hoc Group January 19-23, 2004).

^{15/} By contrast, in the E-911 proceedings to which law enforcement points, the Commission had established detailed requirements and performance standards that carriers had to meet by specified deadlines. *See, e.g.*, 47 C.F.R. § 20.18.

^{16/} TIA Standard/ATS Committee T1 Trial Use Standard, “Lawfully Authorized Electronic Surveillance” J-STD-025-B.

^{17/} For example, in order for an equipment vendor to implement CALEA functionality, it must have a precise definition of the “message set” and handoff interface for the information that should be delivered from carriers to law enforcement to specify the particular actions and events that occur during a communication. The J-STD-025-B contains such detailed technical specifications only with respect to a subset of packet services that Verizon does not provide. By contrast, this standard does not reflect the specific requirements for broadband access services such as Digital Subscriber Line (DSL).

^{18/} For example, the protocol or format of the information intercepted will vary depending on the type of service and where in the network architecture Verizon attempts to conduct the intercept. If the intercept access point (IAP) is integrated into a router, then the carrier can choose the particular format and technology used to deliver the lower layer protocols (layers 1 and 2), even if that is different from the protocol used for the service. If, on the other hand, the IAP is set on the communication link, then the carrier likely would deliver the full stack in the same protocol used by the service.

While the Petitioners correctly note that the absence of industry standards does not excuse carriers' obligations to comply with CALEA (Petition at 37), the reality is that most carriers, including Verizon, employ open standards across vendors and providers, and most manufacturers build to a single industry standard, not variations for each carrier. This approach reduces manufacturers' and carriers' development costs and law enforcement's collection equipment costs. Thus, CALEA clearly makes industry standards and safe harbors a focal point of compliance. Much of the work that manufacturers and carriers must do to achieve CALEA-compliance cannot begin without an industry-approved standard. Industry already has taken important steps toward developing standards for broadband access services and is continuing to press ahead on these standards. But imposing an arbitrary fixed deadline for completion of standards is not practicable and does not take into account the significant remaining issues concerning what CALEA requires or even what the needs of law enforcement are in a packet-switched environment.

Third, the Petitioners propose that six months after selection of a standard, a carrier certify that each of its manufacturers has developed and made available the carrier's intercept solution, and that such solution conforms to the intercept standard identified in the prior interim benchmark. But it is unrealistic to expect a manufacturer to develop and make available a solution in six months, particularly in a world where industry-wide standards would not be in place, as they would not be under the Petitioners' proposal, such that manufacturers would be required to develop a different solution for each carrier. Even if industry-wide standards were in place, moreover, vendors often plan product enhancements (*i.e.*, features in software releases) on a far longer term timeframe than six months. Indeed, development of new code or even new equipment or network elements can take substantially longer depending on the complexity and

scope of the undertaking. Even once a manufacturer has developed a solution, carriers still must perform formal testing and further development efforts (if the test results indicate changes are necessary) to determine whether the solution meets the relevant requirements, a process that itself takes at least three months. Thus, the effect of the Petitioners' proposal would be to leave manufacturers only three months to develop CALEA solutions, which typically would be inadequate. Accordingly, in the forthcoming rulemaking, the Commission should obtain input from manufacturers and others on the time frame within which they can develop and make available CALEA-compliant solutions for broadband access and other packet-switched services.

Fourth, the Petitioners propose that carriers be given three additional months to install and deploy their packet mode CALEA solutions throughout their networks. But the quantity and variety of equipment that may require upgrades make a three-month time period unrealistic in many cases. Any rollout schedule obviously must give providers sufficient time to deploy the solution in a way that does not disrupt the operation of their networks. Again, the Commission should obtain input in its rulemaking on what is entailed in deploying CALEA capabilities once they have been developed and are available from the equipment manufacturers.

Ultimately, industry and law enforcement must continue to work together to develop broadband access solutions that work for the entire industry and that meet the legitimate needs of law enforcement. Once they do so, there should be less need for extensions than law enforcement prophesizes. However, the development of standards and CALEA solutions is an uncertain process, and the Commission should not foreclose further extensions if a carrier can show that compliance is not reasonably achievable at the time it requests an extension notwithstanding its commercially reasonable efforts to comply. This approach is required by the

statute itself, which by its express terms establishes the “reasonably achievable” standard for considering such extension requests.^{19/} See 47 U.S.C. § 1006(c)(2).

III. COST RECOVERY ISSUES

Verizon, and other carriers, should be able to recover their costs of complying with CALEA for broadband services since those are costs that are imposed by government mandate. Verizon agrees with the Petitioners that the Commission should permit providers to pass along CALEA costs to customers through, for example, a competitively-neutral surcharge that applies to end users, as well as wholesale customers. Although carriers should be free to make the business decision as to whether and how to assess such a surcharge in a competitive environment, they should at least have the option to pass along those costs. Section 229 of the Act expressly permits the Commission to authorize carriers to adjust their charges and practices to recover the costs of meeting the requirements of section 103. 47 U.S.C. § 229(e).

As the Commission previously found, there are also circumstances in which carriers should be permitted to recover compliance costs from law enforcement. In some cases, the statute directly provides for cost recovery. For example, the statute provides a mechanism by which the Attorney General must reimburse carriers for costs related to meeting the statutory

^{19/} The Petitioners suggest that the Commission could not consider the fact that a carrier’s vendor had not developed a CALEA-compliant solution in deciding whether to grant an extension to the carrier. (Petition at 51-52.) But the fact that a carrier’s vendors have not developed the technology necessary to fulfill CALEA obligations almost by definition renders compliance not “reasonably achievable” for a carrier. This proposal would improperly remove the burden from manufacturers to develop CALEA-compliant technology, and place the burden instead on providers. CALEA puts the onus on “manufacturer[s] of telecommunications transmission or switching equipment . . . [to], on a reasonably timely basis and at a reasonable charge, make available to the telecommunications carriers using its equipment, facilities, or services such features or modifications as are necessary to permit such carriers to comply with the capability requirements of section . . . 1003.” 47 U.S.C. § 1005(b). By preventing providers from obtaining extensions even where their vendors could not provide CALEA-compliant solutions, the Petitioners’ proposal would make carriers responsible for their vendors’ failures to meet this statutory requirement.

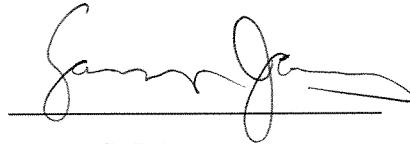
capacity requirements. 47 U.S.C. § 1003(e). In addition, as the Petitioners note, carriers are free to petition the Commission for a determination that compliance with respect to particular facilities or services is not “reasonably achievable,” based on factors such as cost, and, if the Commission agrees, then the carrier is deemed in compliance unless law enforcement agrees to pay the compliance costs. 47 U.S.C. § 1008(b)(2).

Likewise, the Commission has found that service providers in some circumstances are permitted to charge some of their costs to law enforcement through the mechanism for cost recovery provided under Title III. According to the Commission, providers can “recover at least a portion of the CALEA software and hardware costs by charging to [law enforcement], for each electronic surveillance order authorized by CALEA, a fee that includes recovery of capital costs, as well as recovery of the specific costs associated with each order.” *Order on Remand* at 6916-17 ¶ 60. The Commission’s decision in this regard was a sound one, and did not exceed the Commission’s authority to administer CALEA under the Act. Indeed, requiring law enforcement to bear some costs ensures that it at least considers the cost consequences before making a particular request and is not free to ask for any capability even if it is not cost-effective. In particular, where carriers incur particular costs to accommodate specific law enforcement requests, they should be permitted to pass those costs along to law enforcement. For example, carriers should be allowed to recover from law enforcement costs related to law enforcement requests with respect to the manner and location of delivery and transport of intercepted information to law enforcement, such as the costs a carrier incurs to “backhaul” traffic so it can be delivered to law enforcement at a single centralized point if law enforcement so requests.

CONCLUSION

As set forth above, the Commission should make clear that CALEA applies equally to voice over IP and broadband access services of all providers regardless of the classification of those services under Title I or Title II for regulatory purposes. The Commission should also conduct a rulemaking to determine the scope of those obligations and how they apply to different service providers, as well as to examine the Petitioners' various proposals concerning the timeline for compliance and cost recovery.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Samir Jain', written over a horizontal line.

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April 12, 2004

Attachment A

The Verizon local exchange carriers participating in this filing are:

Contel of the South, Inc. d/b/a Verizon Mid-States
GTE Midwest Incorporated d/b/a Verizon Midwest
GTE Southwest Incorporated d/b/a Verizon Southwest
The Micronesian Telecommunications Corporation
Verizon California Inc.
Verizon Delaware Inc.
Verizon Florida Inc.
Verizon Hawaii Inc.
Verizon Maryland Inc.
Verizon New England Inc.
Verizon New Jersey Inc.
Verizon New York Inc.
Verizon North Inc.
Verizon Northwest Inc.
Verizon Pennsylvania Inc.
Verizon South Inc.
Verizon Virginia Inc.
Verizon Washington, DC Inc.
Verizon West Coast Inc.
Verizon West Virginia Inc.

The Verizon long distance companies participating in this filing are:

Bell Atlantic Communications, Inc. d/b/a Verizon Long Distance
NYNEX Long Distance Company d/b/a Verizon Enterprise Solutions
Verizon Select Services Inc.
Verizon Global Networks Inc.

The Verizon Avenue Corp. companies participating in this filing are:

OnePoint Communications–Colorado, L.L.C. d/b/a Verizon Avenue
OnePoint Communications–Georgia, L.L.C. d/b/a Verizon Avenue
OnePoint Communications–Illinois, L.L.C. d/b/a Verizon Avenue
VIC-RMTS-DC, L.L.C. d/b/a Verizon Avenue


CERTIFICATE OF SERVICE

I, Carole Walsh, do hereby certify that true and accurate copies of the foregoing, Comments of Verizon on Law Enforcement's Joint Petition for Expedited Rulemaking Concerning the Communications Assistance for Law Enforcement Act, were served by overnight courier this 12th day of April, 2004, to:

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